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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,150	02/17/2004	David Munn	275.00090101	1273

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EXAMINER	
THOMAS, TIMOTHY P	
ART UNIT	PAPER NUMBER
1614	

MAIL DATE	DELIVERY MODE
06/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,150	MUNN ET AL.	
	Examiner	Art Unit	
	TIMOTHY P. THOMAS	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,98-101,103,105,106,108,124-127,129,131 and 132* is/are rejected.

7)☒ Claim(s) *105* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/6/2008; 11/12/2008; 7/9/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1,2,5-7,10,17,18,20-24,26,27,43,97-103,105,106,108,129,131 and 132.
Continuation of Disposition of Claims: Claims withdrawn from consideration are 1,5-7,10,17,18,20-24,26,27,43,97,102,109-123 and 128.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/2008 has been entered.

Election/Restrictions

2. Applicant's election with traverse of (i) the method of claim 2; (ii) the composition is administered alone; (iii) oral administration; (iv) the formulation is not formulated for controlled release; (v) solutions; (vi) is not specified, claims 104 and 130 have been canceled, applicant argues this election is moot; while technically not responsive, in order to advance prosecution, this is taken to indicate none of the formulation species previously recited is required; and (vii) the tumor specie of melanoma in the reply filed on 3/23/2009 is acknowledged. The traversal is on the ground(s) that the additional members will be uncovered by a search for the genus of the elected claims and will not present a burden to the Examiner. This is not found persuasive because each of the numerous species recited in the claims requires a separate search query, and are not likely to be found in the same prior art reference; additionally, some of the species (ii) require rejections under 112, 1st paragraph, which are not applicable to other non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 6-7, 10, 17-18, 20-24, 26, 97, 102, 109-123 and 128 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/23/2009.

4. It is noted that the prior withdrawal of claims 1, 5, 27, 43 as drawn to non-elected inventions is still applicable and these claims remain withdrawn.

Response to Arguments

5. Applicants' arguments, filed 10/14/2008, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

6. Applicant's arguments with respect to the rejection under 35 USC 102 have been fully considered but they are not persuasive:

Claims 2, 98-101, 103, 105-106 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Den Eynde et al. (WO 00/66764; 2000; cited in prior Office Action).

The rejection with respect to claim 2 has been presented on the record. With respect to the new claims, Van Den Eynde teaches when administered in vivo, the compositions can be administered in preparations that contain carriers (p. 18, lines 20-23); oral administration (p. 18, line28); carriers such as Ringer's solution and isotonic sodium chloride solution (would form a solution; p. 20, lines 30-31); 27 % of human

melanoma tumor cell lines express IDO (p. 24, Table 1); initial doses are followed by higher doses under certain circumstances (this would be at least 2 lower doses, from the plural form of the word, followed by at least 2 higher doses; followed by indicates a time interval, which meets the limitation of claim 105; p. 19, lines 18-21).

Applicant argues that the amended claim language "consisting essentially of" 1-methyl-D-tryptophan, now reads on an embodiment that is not taught by Van Den Eynde (i.e., the administration of 1-methyl-L-tyrptophan is excluded from the claim language). As pointed out in MPEP 2105, the transitional phrase "consisting essentially of" limits the scope of a claim to the specific materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. A review of the data disclosed in the instant specification, for example in Figure 11, indicates that the addition of an anti-cancer drug significantly reduces the tumor growth, but 1-methyl-D-tryptophan alone has little, if any, effect on the progression of tumor growth. Data such as Figure 11 does not make clear how the addition of 1-methyl-L-tryptophan would alter the little or no effect of the claimed method of delaying the relapse or progression of a tumor. Therefore, the disclosure of the specification does not support the argument that 1-methyl-L-tryptophan would change the characteristic of tumor progression. As pointed out in MPEP 2105, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising". In the instant case, equivalence to "comprising" does not exclude the presence of 1-methyl-L-tryptophan as taught by Van Den Eynde.

Additionally, according to MPEP 2105, if an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In the instant case, applicant would have the burden to show that the presence of 1-methyl-L-tryptophan will change the progression of a tumor growth or timing of a relapse of tumor growth, in a tumor, such as the elected melanoma tumor. This is not the same showing that 1-methyl-D-tryptophan has enhanced inhibition of IDS over the L isomer or the D/L racemic mixture.

7. The double patenting rejection is currently withdrawn.

The elected species of the instant claims are limited to the administration of 1-methyl-D-tryptophan without additional chemotherapeutic agents; the presence of an additional chemotherapeutic agent is required for all of the allowed claims in 10/780,797. Therefore, the allowed claims do not read on the instant elected embodiment. It is noted that should the examined subject matter of the instant application later be expanded to include combination therapies, the rejection will be reconsidered at that time.

8. Applicant's arguments with respect to the enablement rejection have been fully considered but they are not persuasive:

Claims 2, 98-101, 103, 105-106, 108, 124-127, 129 and 131-132 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for delaying the progression of a melanoma tumor comprising administering the

combination of 1-methyl-D-tryptophan and cyclophosphamide, does not reasonably provide enablement for delaying the relapse of or progression of a melanoma tumor or any other tumor by administering 1-methyl-D-tryptophan without an additional chemotherapeutic agent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The considerations presented on the record are also applicable to this rejection.

The elected embodiment of administering 1-methyl-D-tryptophan without an additional chemotherapeutic agent present would require undue experimentation to find conditions that would result in delayed relapse or delayed progression of a melanoma tumor. Figure 11 indicates no change or very little change of tumor growth with 1-MT or 1-M-[D]-T in melanoma cell lines. This is also the case for the data presented in the 10/14/2008 Prendergast Declaration for lung cancer and colon cancer implanted in mice. Since applicant's own data predicts no effect on tumor growth would be expected when 1-methyl-D-tryptophan is administered without an additional chemotherapeutic agent, there is an expectation that the method would not be effective in achieving the claimed outcome of the method for mice implanted with tumors; how much more unpredictable when the method is applied clinically to humans with any type of melanoma, irrespective of whether the tumor secretes IDO.

Applicant argues that synergistic effect of 1-methyl-D-tryptophan is shown in an in vivo cancer model with both radiation and chemotherapeutic agents. The disclosure at p. 53, line 3, indicates that 1-MT alone had no effect. Similar results are presented in

Figure 11 for the D isomer. The point is that for the elected embodiment of 1-methyl-D-tryptophan administered without radiation or a chemotherapeutic agent, the result of no effect does not enable delaying the progression of a tumor.

Applicant further argues that the Prendergast Declaration shows that administration of D-1MT as part of a treatment regimen also including administration of a chemotherapeutic agent resulted in the inhibition of two other types of tumor cells, lung and colon cancer cells; one skilled in the art would be able to utilize the present invention in a wide variety of cancers, as the methods of the present invention have broad applicability. A review of the data also indicates that 1-methyl-D-tryptophan administered without a chemotherapeutic agent had no effect in one cell line or only a very small trend toward an effect in the other cell line. This data does not enable delaying the relapse or progression of a tumor in a subject when 1-methyl-D-tryptophan is administered without radiation or a chemotherapeutic agent.

It is noted that requiring that 1-methyl-D-tryptophan is coadministered with a chemotherapeutic agent, such as the agent cyclophosphamide, or with radiation, for which synergistic activity is present in the record for three cancer types, would overcome this rejection.

Claim Objections

9. Claim 105 is objected to because of the following informalities: “is carrier out” is improper English grammar; it is assumed “carrier” is a typographic error of “carried”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 2, 98-101, 103, 105-106, 108, 124-127, 129 and 131-132 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claim 2, the composition "consisting essentially of" 1-methyl-D-tyrptophan, does not make clear what the basic and novel characteristics actually are, or what compounds are excluded by this language. As pointed out in MPEP 2105, the transitional phrase "consisting essentially of" limits the scope of a claim to the specific materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. While it is acknowledged that applicant has argued that the language excludes the presence of 1-methyl-L-tryptophan, a review of the data, for example in Figure 11, would indicate that the addition of an anti-cancer drug significantly reduces the tumor growth, but 1-methyl-D-tryptophan alone has little, if any, effect on the progression of tumor growth. Data such as Figure 11 does not make clear how the addition of 1-methyl-L-tryptophan would alter the little or no effect of the claimed method of delaying the relapse or progression of a tumor.

This confusion is exacerbated by the dependent claim 108, which specifically recites that the pharmaceutical composition does not contain 1-methyl-L-tryptophan. If in fact the meaning of "consisting essentially of" is to exclude 1-methyl-L-tryptophan,

then claim 108 would only be a recitation of the same limitation already present in the independent claim.

As pointed out in MPEP 2105 absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising".

Conclusion

12. No claim is allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY P. THOMAS whose telephone number is (571)272-8994. The examiner can normally be reached on Monday-Thursday 6:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy P Thomas/
Examiner, Art Unit 1614

/Ardin Marschel/
Supervisory Patent Examiner, Art Unit 1614